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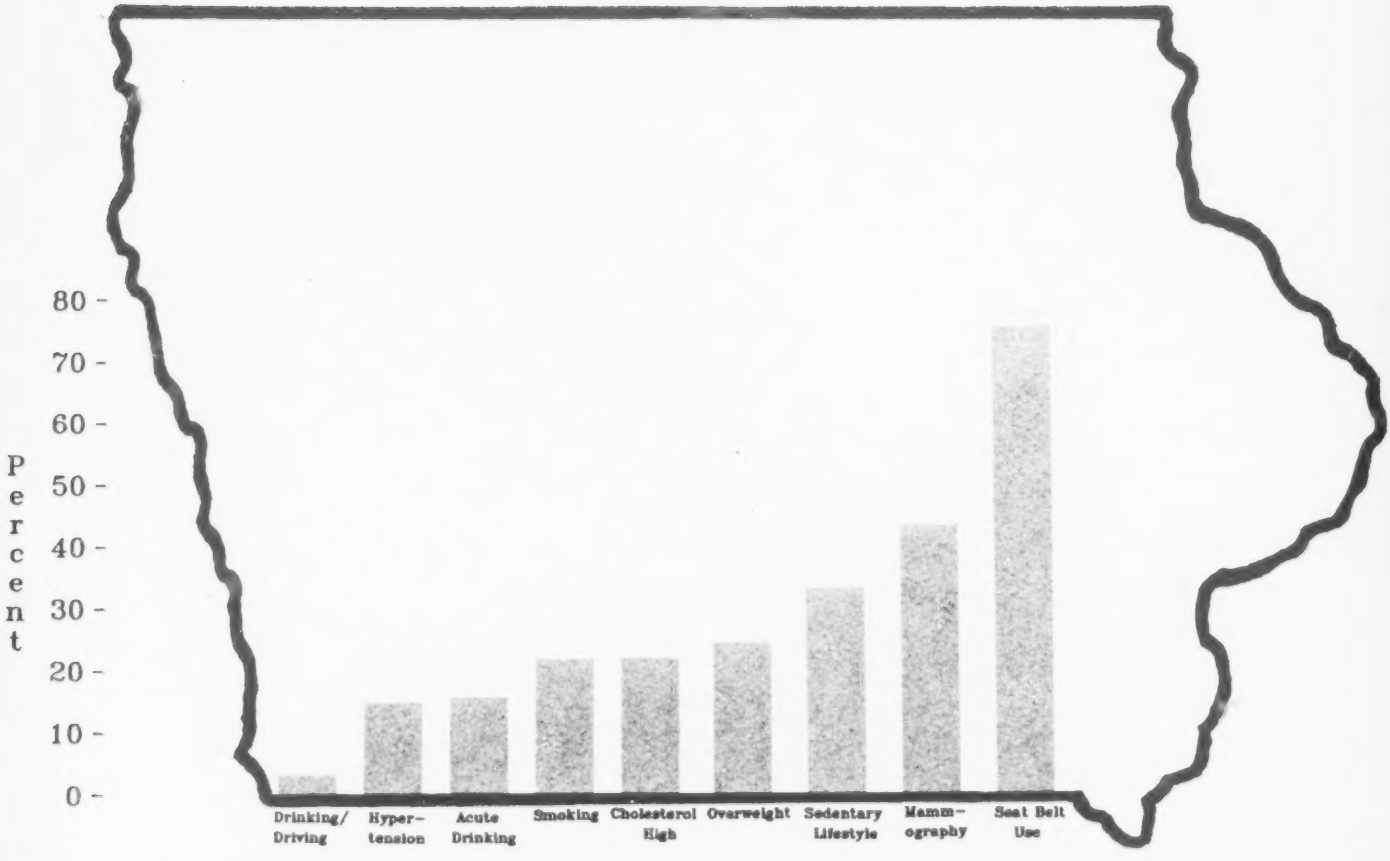
REPORT ON THE HEALTH BEHAVIORS of IOWANS 1989



IOWA DEPARTMENT OF PUBLIC HEALTH • DIVISION OF FAMILY AND COMMUNITY HEALTH
Christopher G. Atchison, Director • Terry E. Branstad, Governor

IOWA

HEALTH RISK BEHAVIORS

1989

FINAL REPORT

Governor of Iowa

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INTRODUCTION

Iowa's 1989 Behavioral Risk Factor Surveillance System (BRFSS) was a telephone survey of adults, 18 years of age and over, regarding their health habits. Approximately 99 interviews were conducted each month from January through September 1989. One hundred twenty interviews were conducted each month from October through December 1989. The total sample size was 1286 in 1989.

The telephone interview was conducted by individuals at the Division of Iowa Agricultural Statistics under contract with the Bureau of Nutrition and Health Promotion, Iowa Department of Public Health (IDPH). Telephone numbers were randomly generated by the Centers for Disease Control (CDC). The respondents were asked information regarding a variety of health habits practiced in their every day life. CDC aggregated the monthly data, weighted it according to Iowa population estimates, and estimated the prevalence of risk factors related to the ten leading causes of death, including the following:

Seat belt use
Tobacco use
Hypertension
Diet and weight
Exercise
Alcohol use
High blood cholesterol
Mammography screening

This information is used to implement and support health education activities designed to reduce premature death and disability of Iowa residents. Comparable methods are used in other states which allow for state to state comparisons and assessment of geographic patterns of risk factor prevalence.

GOAL AND OBJECTIVES
OF THE SURVEILLANCE SYSTEM

State public health departments are responsible for planning, implementing and evaluating disease prevention programs. Many of these programs deal with health risk behavior modification. Some examples of health risk behavior modification programs in Iowa are: seat belt legislation; Clean Indoor Air Act; and drinking and driving campaigns. In order for these programs to be effective, the prevalence of risk factors in the population needs to be assessed and monitored. The Centers for Disease Control (CDC) developed the Behavioral Risk Factor Surveillance System (BRFSS) to help states assess health risks and monitor trends.

Goal

To provide data to initiate and guide health promotion and disease prevention programs.

Objectives

1. To determine state specific prevalence of personal health behavior related to the leading causes of premature death.

2. To develop the capacity of state health departments to conduct credible telephone surveys.

3. To advance the understanding that health-related behaviors are critical indices of health.

METHODOLOGY

The Behavioral Risk Factor Surveillance System (BRFSS) was developed and is supported each year by the Centers for Disease Control (CDC). Iowa Department of Public Health (IDPH) works in conjunction with the CDC to conduct the surveillance system in Iowa.

Questionnaire Design

The BRFSS questionnaire is analyzed and updated each year by CDC and the BRFSS representatives from each participating state. Discussion on previously telephone-tested questions and current BRFSS questions occurs at the annual BRFSS conference.

The questionnaire consists of three sections: 1) the core questions required of all states participating in BRFSS, 2) a set of modules developed by CDC which states may opt to offer as part of their survey, and 3) optional state designed questions which are administered by individual states to address locally identified health problems.

In addition to the series of health behavior questions, participants are asked demographic information such as age, sex, race, marital and employment status, household income and education level. Participation is random, anonymous, voluntary and confidential.

Sampling Process

Households were selected randomly using the modified Waksberg, a three-stage cluster sampling technique. The sampling methodology was designed to produce a random sample of Iowa telephone numbers, including unlisted and

new subscribers. This method randomly generates telephone numbers by using the first eight digits (area code, prefix, first two suffix numbers) of the ten-digit telephone numbers. From that number a "cluster" of 100 numbers were further generated using the last two telephone suffix digits. These clusters were then screened by calling only the first phone number generated in the cluster. If the number was a residence, versus a business, the entire cluster of 100 numbers was accepted. Business and non-working numbers were rejected. This screening mechanism, of accepting clusters having a greater probability of residential numbers, improves survey efficiency by 10 to 20%.

Once a cluster was screened and accepted, the numbers were randomly called until three interviews were completed within each cluster for a total of 120 interviews. Interviewers made multiple attempts to a number to achieve a completed interview before replacing that number.

A risk table was used to randomly select one person, 18 years or older, residing in the home. If the person selected was not available, an appointment was made to complete the interview at another date and time. If the person was not available during the interview period, or if they refused to participate, no other member of that household was interviewed. The process began again to randomly select a telephone number from the same cluster.

Interview Process

The IDPH has an interagency contract with Iowa Agricultural Statistics to conduct the interviews. The interviews were conducted evenings and weekends with appointments made as needed to complete interviews during the daytime hours. The phone calls started the second Wednesday of the month and continued for

seven days or until the necessary 120 interviews were completed. The average time to complete an interview in 1989 was twelve minutes.

Using the paper and pencil method, interviewers read from the questionnaire and manually recorded responses on the questionnaire. The results were coded and entered into the computer. The monthly data discs were submitted to CDC for editing. After editing, the data were weighted to account for the 1980 age, race, and sex distribution of Iowans.

Limitations

Telephone interviews provide a means to conduct affordable surveys to monitor the prevalence of behavioral risk factors. Self-reported behavioral data obtained by phone has limitations and must be interpreted with caution.

One potential source of error is biased population estimates due to underrepresentation of certain groups. The bias may be caused by difficulty in contacting the subgroups, a higher refusal rate or lack of telephone services utilized by that subgroup. The 1980 census data is used to weight the data to account for age, race, and sex distribution differences and to correct for this bias.

Another limitation is due to the self-reported nature of the survey. Respondents may have a tendency to underreport behaviors that are known to be unhealthy, socially unacceptable or illegal (seat belt non-use, drinking and driving). These biases may vary depending on the specific risk factor. In cases where self-reporting may play a significant role, further discussion is presented in the section for the specific risk factor.

Finally, breaking down the data into age and sex categories decreases the sample size of the individual strata and decreases the statistical power to determine statistically significant differences. Some data may not be reported as statistically significant due to small sample size.

DIET AND OVERWEIGHT

Background

Obesity is probably the most serious nutrition problem in America today. Health experts agree that being overweight is a risk factor for many diseases. Obesity is associated with the onset and progression of high blood pressure, diabetes, and atherosclerosis[1]. Obese individuals are also at increased risk for stroke, gallbladder disease and degenerative joint disease[2].

Exact measurements of body fat require sophisticated equipment. To circumvent this, obesity is often estimated from weight standards that are adjusted for body size. Two methods commonly used to estimate obesity are relative weight and body mass index. Relative weight is defined as actual body weight divided by the desirable weight for a person of medium frame. Body mass index is defined as a person's body weight in kilograms divided by their height in meters squared [weight (kg)/height (m^2)]. Both relative weight and body mass index correlate roughly with health risk and longevity[3]. However, experts feel body mass index is a more precise measurement[4], and therefore BMI was used in this surveillance system.

For overweight individuals, health experts recommend a diet that lowers the daily calorie intake below the amount of energy the person expends each day[3]. A well-balanced, calorie-restricted diet which offers a wide variety of foods is the best way to lose weight. Such a diet has the fewest negative side effects and enables the individual to maintain lifelong dietary habits. In addition, exercise is important to successful weight loss. Exercise burns calories which may keep people from exceeding their calorie requirements.

Numerous rigid diets have been developed attempting to improve on weight loss over the simple calorie-restricted plan. The rigid diets tend to be limited in the type, amount, palatability, and variety of food. Often these diets are nutritionally unbalanced and vary in length of time they can be safely adhered to. For these reasons, they cannot be recommended.

Overweight in Iowa

Definition:

Overweight based on body mass index (BMI) - defined as weight in kilograms divided by height in meters squared [weight (kg)/height (m^2)]. For females, overweight is defined as BMI $\geq$ 27.3 and for males it is defined as BMI $\geq$ 27.8.

Approximately 25.3% of Iowans are estimated to be overweight based on BMI. The self-reported weights show 27.4% of males and 23.4% of females are overweight based on BMI. When asked if the participants consider themselves to be overweight, underweight or average, 30.3% of males and 46.4% of females felt they were overweight. A total of 38.7% of Iowans consider themselves overweight.

Of the Iowans reporting an attempt at weight loss, 23.7% were males and 47.2% were females. The method to achieve weight loss varies. Eating fewer calories to lose weight was reported by 61.6% of males and 73.1% by females. Losing weight by increasing activity was reported by 53.5% of males and 50.5% of females. Use of diet pills was reported by 1.8% of males and 2.4% of females. The process of fasting for 24 hours or longer was practiced by 2.6% of males and 2.1% of females. Participation in an organized weight control program was reported by only 0.9% of males and 6.7% of females. The use of self-induced

vomiting for weight control was denied by 98.8% of males and 99.2% of females. Advice by a doctor or health professional to reduce weight was given to 15.5% of the males and 17.1% of females.

Comparison with Other States

In 1989, Iowa had the second highest prevalence of overweight based on BMI out of the 40 states conducting the BRFSS. The national median was 20.4%, while Iowa reports 25.3% of the adult population as overweight.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives state the prevalence of overweight should be reduced to 20% among people ages 20 through 74 years. The 1989 prevalence of overweight for men (27.1%) and women (23.4%) needs to be decreased by approximately 27% for males and 14% for females to achieve this objective for Iowa.

BIBLIOGRAPHY FOR DIET AND OVERWEIGHT

1. U.S. Department of Health and Human Services: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Public Health Service, DHHS Publication No. (PHS) 91-50213, 1991.
2. U.S. Department of Health and Human Services: The Surgeon General's Report on Nutrition and Health. Public Health Services, Washington, D.C., DHHS Publication No. (PHS)88-50210, 1988.
3. Samuels, M., Samuels, N.: The Well Adult. New York, Summit Books, 1988.
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OVERWEIGHT BASED ON BODY MASS INDEX (BMI)*

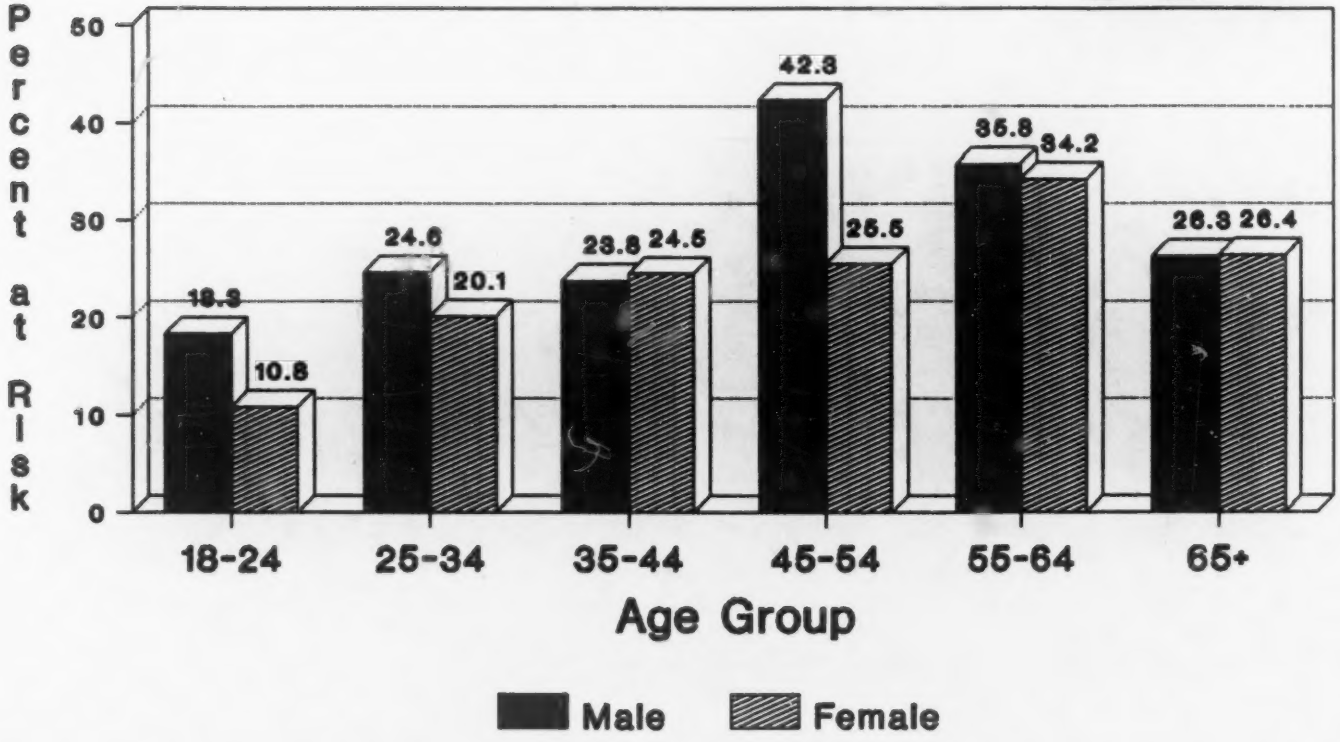
Sex	Age Group	At Risk N	At Risk %
Male	18-24	11	18.3
	25-34	27	24.6
	35-44	29	23.8
	45-54	28	42.3
	55-64	28	35.8
	65+	32	26.3
	Total	155	27.4
Female	18-24	5	10.8
	25-34	31	20.1
	35-44	31	24.5
	45-54	32	25.5
	55-64	30	34.2
	65+	49	26.4
	Total	178	23.4
Total (both sexes)	18-24	16	14.6
	25-34	58	22.4
	35-44	60	24.1
	45-54	60	33.7
	55-64	58	35.0
	65+	81	26.3
	Total	333	25.3

*Overweight - Body Mass Index is defined as weight in kilograms divided by height in meters squared (W/H**2). For females, overweight is BMI $\geq$ 27.3 and for males with BMI $\geq$ 27.8.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

OVERWEIGHT

(Based on Body Mass Index)



Source:1989 Behavorial Risk Factor Surveillance System, IDPH
n=333

HIGH BLOOD PRESSURE

Background

Elevated blood pressure is correlated with coronary heart disease and stroke, the first and third leading causes of death in the United States[1] and in Iowa[2]. The National High Blood Pressure Education Program and new technology to improve blood pressure control has decreased the death rate from stroke by 50 percent over the past 15 years[1]. Improved treatment and control of high blood pressure continues to play a role in the prevention of coronary heart disease and stroke. High blood pressure is also associated with diseases of the kidneys, eyes and peripheral arteries[1]. High blood pressure has been shown to interact with the risk factors of cigarette smoking and high blood cholesterol to increase the risk of coronary heart disease[1].

High Blood Pressure in Iowa

Definition:

Hypertension - Respondents who report they have been told their blood pressure is high ($\geq$ 140/90 mmHg) more than once, or are on medication, or report their blood pressure is still high. This data item has been added to define "current hypertensives," a reflection of the known, diagnosed hypertensives in the population. This is the National Heart, Lung and Blood Institute's definition.

In 1989, the prevalence of self-reported high blood pressure* was 15.8% for Iowa. For males, the prevalence was 14.5%, while it was 17.1% for females.

Comparison with Other States

In 1989, Iowa had the ninth lowest prevalence of high blood pressure out of the 40 states conducting the BRFSS. The national median was 17.2%, while Iowa reports 15.8% of the adult population having high blood pressure.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives for high blood pressure state that at least 50% of the people with high blood pressure should have control (at or below 140/90) for two years or more. In 1989, 92% of Iowans reported their high blood pressure was currently normal or under control. This figure is similar to findings in all 40 states participating in the BRFSS in 1989. The second National Health and Nutrition Examination Survey (NHANES II) conducted from 1976 through 1980 found that only 34% were adequately controlled[1]. More recent estimates suggest 40-60% of people with high blood pressure have it under control. Thus, the self-reported data for Iowans' control of high blood pressure are not reliable.

*It is important to keep in mind the limitations of interpreting self-reported data. Validity of the survey results depends on the accuracy of responses by the participants. In terms of hypertension, the participants must understand the definition of hypertension and must be followed by a health professional who is working with them to lower a high blood pressure.

BIBLIOGRAPHY FOR HIGH BLOOD PRESSURE

1. U.S. Department of Health and Human Services: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Public Health Service, DHHS Publication No. (PHS) 91-50213, 1991.

2. Iowa Department of Public Health: Iowa 1989 Vital Statistics. Des Moines, 1989.

HYPERTENSION* **

At Risk

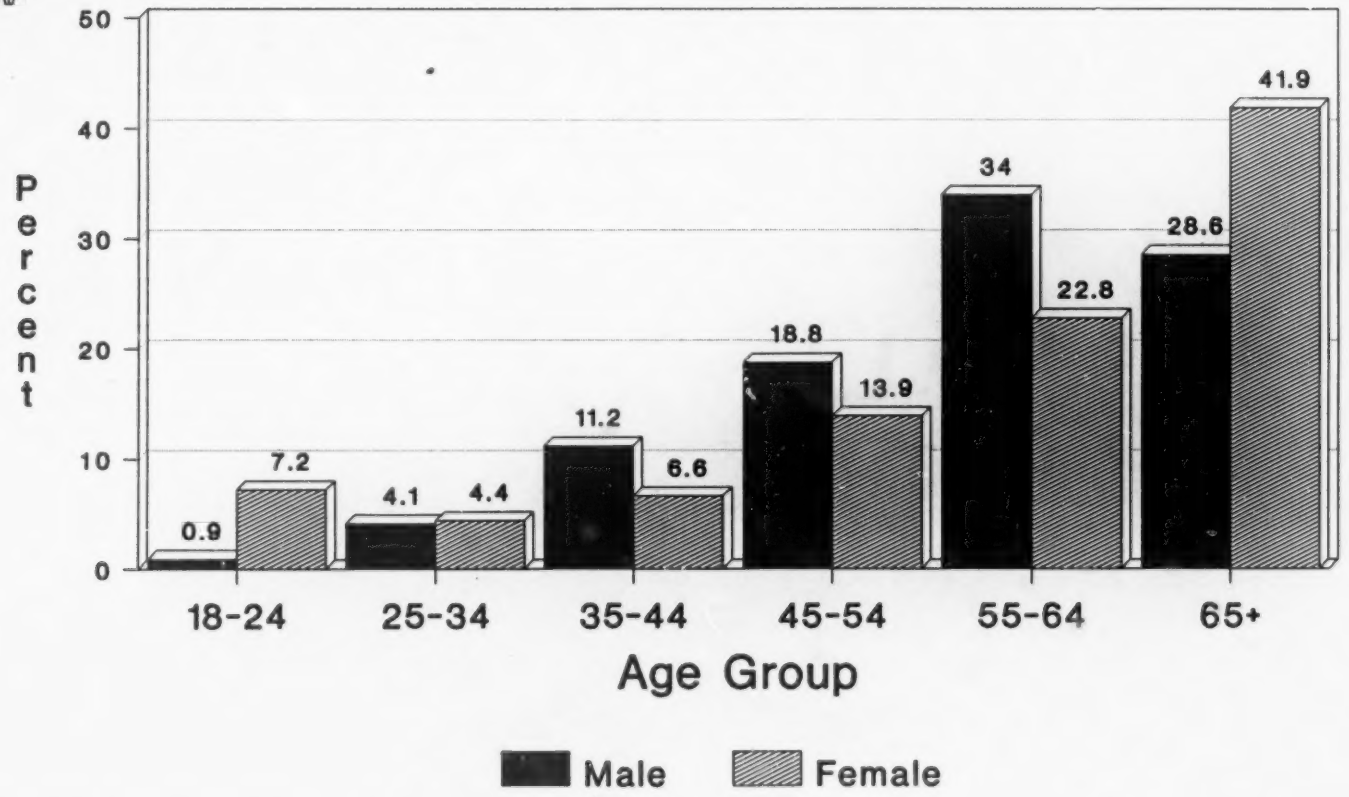
Sex	Age Group	N	%
Male	18-24	1	0.9
	25-34	5	4.1
	35-44	13	11.2
	45-54	16	18.8
	55-64	27	34.0
	65+	37	28.6
	Total	99	14.5
Female	18-24	2	7.2
	25-34	7	4.4
	35-44	9	6.6
	45-54	19	13.9
	55-64	22	22.8
	65+	80	41.9
	Total	139	17.1
Total (both sexes)	18-24	3	4.1
	25-34	12	4.2
	35-44	22	8.9
	45-54	35	16.3
	55-64	49	28.2
	65+	117	36.6
	Total	238	15.8

*Hypertension - Respondents who report they have been told their blood pressure is high more than once, or are on medication, or report their blood pressure is still high. This data item has been added to define "current hypertensives," a reflection of the known, diagnosed hypertensives in the population. This is the National, Heart, Lung and Blood Institute's definition.

**It is important to keep in mind the limitations of interpreting self-reported data. Validity of the survey results depends on the accuracy of responses by the participants. In terms of hypertension, the participants must understand the definition of hypertension and must be followed by a health professional who is working with them to lower a high blood pressure.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

HYPERTENSION



Source:1989 Behavioral Risk Factor Surveillance System, IDPH
n=238

TOBACCO USE

Background

Tobacco use is the single most important preventable cause of death and disease in the United States[1]. An estimated 390,000 deaths are associated with cigarette smoking each year in our nation[1].

Tobacco use in the United States has seen a dramatic reduction over the past 25 years. The decrease in the national smoking prevalence from 40% in 1965 to 29% in 1987 has prevented or postponed an estimated 789,200 smoking-related deaths[1]. Each of these prevented or postponed deaths represents an average of 21 years gained in life expectancy[1].

Unfortunately, tobacco use is still responsible for one of every six deaths in the United States[1]. It is a major risk factor for heart and blood vessel disease; cancers of the lung, larynx, pharynx, oral cavity, esophagus, pancreas, and bladder; respiratory infections; and stomach ulcers[1].

Tobacco Use in Iowa

In 1989, 22.7% of adult Iowans reported to be current smokers (those who have smoked at least 100 cigarettes in their life and still smoke). Approximately 21.1% of males reported to be current smokers while 24.1% of females were current smokers.

Comparison with Other States

In 1989, Iowa ranked 15th out of the 40 states participating in the BRFSS for having the lowest prevalence of cigarette smoking. The national median was

24.2%, while Iowa reported 22.7% of the adult population as being current smokers.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives state that the prevalence of cigarette smoking should be no more than 15% among people age 20 and older. The 1989 BRFSS sample reported 22.7% of Iowans age 18 and older as current smokers. This falls short of the 15% prevalence desired for the Year 2000 Health Objectives.

BIBLIOGRAPHY FOR TOBACCO

1. U.S. Department of Health and Human Services: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Public Health Service, DHHS Publication No. (PHS) 91-50213, 1991.

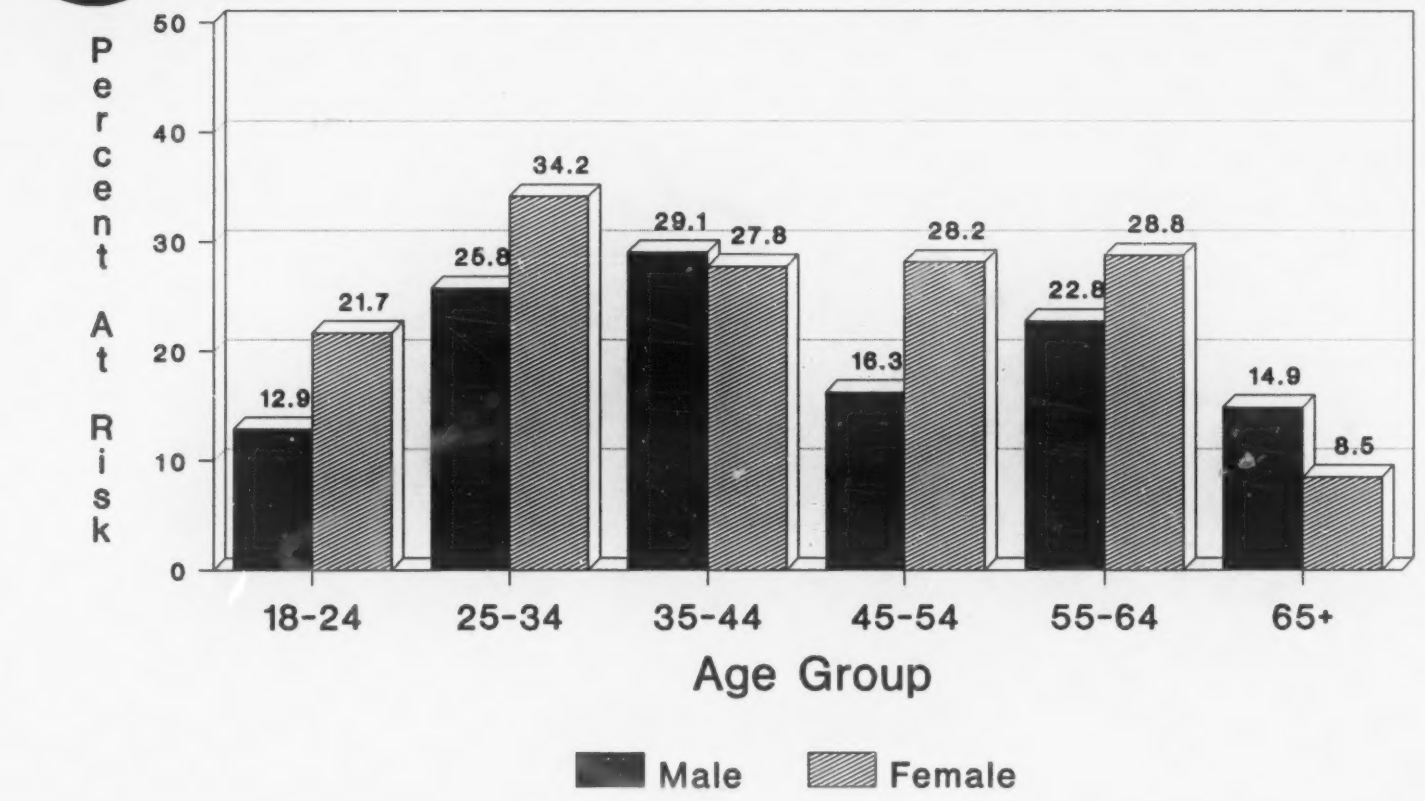
SMOKING STATUS*

Sex	Age Group	At Risk N	At Risk %
Male	18-24	8	12.9
	25-34	30	25.8
	35-44	37	29.1
	45-54	12	16.3
	55-64	19	22.8
	65+	20	14.9
	Total	126	21.1
Female	18-24	9	21.7
	25-34	57	34.2
	35-44	34	27.8
	45-54	30	28.2
	55-64	29	28.8
	65+	21	8.5
	Total	180	24.1
Total (both sexes)	18-24	17	17.3
	25-34	87	30.0
	35-44	71	28.5
	45-54	42	22.4
	55-64	48	25.9
	65+	41	11.0
	Total	306	22.7

*Smoking - Current regular smoker (ever smoked 100 cigarettes and smokes now).

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

SMOKING STATUS



Source:1989 Behavorial Risk Factor Surveillance System, IDPH
n=306

HIGH BLOOD CHOLESTEROL

Background

A blood cholesterol level of 240 mg% or greater is related to a higher incidence of heart disease[1]. Reducing the number of adults with high blood cholesterol (≥ 240 mg%) may reduce the incidence of coronary heart disease[1].

Over the past 20 years, mean serum cholesterol levels have been declining. In the 1960's, mean cholesterol levels for men were 217 mg% and 223 mg% for women. By 1976, mean serum cholesterol had dropped to 211 mg% for men and 215 mg% for women[2].

Detection and treatment of high blood cholesterol have become more prevalent due to the National Cholesterol Education Program (NCEP). As the level of public and professional education increases, proper dietary and drug treatment is initiated resulting in a smaller percentage of adults having elevated blood cholesterol levels.

High Blood Cholesterol in Iowa

Of the survey respondents, 57.6% of adult Iowans reported having their blood cholesterol checked. Of the Iowans who have had their blood cholesterol checked, 22.9% reported it to be high (≥ 240 mg%).

Of those who have high blood cholesterol, 21.6% were men and 24.1% were women. Of those who have high blood cholesterol, 10.5% of the men and 17.2% of females are under doctor's advice to lower their cholesterol. Of the males, 63.3% were advised by their physicians to follow a low fat or low cholesterol diet while 75.0% of females were given dietary advice. Physicians prescribed

cholesterol lowering medication to 20.7% of the males having high blood cholesterol and 21.8% of the females. Referral to a dietitian for help with a cholesterol lowering diet occurred for 19.7% of the men and 18.2% of the females.

Comparison With Other States

Iowa ranked 15th among the 40 states participating in the BRFSS for adults having their blood cholesterol checked. Iowa had 57.6% of the population checked for blood cholesterol levels while the median was 55.1%.

Year 2000 Health Objectives For the Nation

The Year 2000 Health Objectives state that no more than 20% of adults aged 20 through 74 should have a blood cholesterol level of 240 mg% or greater. The 1989 BRFSS sample reported 22.9% of Iowans age 18 and older as having blood cholesterol levels greater than or equal to 240 mg%. This is somewhat greater than 20% prevalence desired for the Year 2000 Health Objectives.

Another Year 2000 Health Objective states that the proportion of adults age 18 and older who have had their blood cholesterol checked within the last five years should increase to at least 90%. The 1989 BRFSS sample showed of Iowans 18 and older who have ever had their blood cholesterol checked, 97.5% have had it checked within the last five years. This far exceeds the Year 2000 Health Objectives. Of the respondents who have had their cholesterol checked, 78.6% had it checked within the past year.

The Year 2000 Health Objectives state that the proportion of adults 18 and older who can report their blood cholesterol level increase to 75%. The BRFSS sample

showed 81% of Iowans who have had their blood cholesterol checked have been told their cholesterol level in numbers, again exceeding the Year 2000 Health Objectives.

Another Year 2000 Health Objective states that the proportion of primary care providers who initiate diet and/or drug therapy at levels of blood cholesterol that accord with current treatment recommendations increase to at least 75%. The BRFSS sample reported of Iowans under a doctor's advice to lower blood cholesterol, 71.4% were provided a low fat or a low cholesterol diet and 18.7% were referred to a dietitian for help with diet. In addition, 21.4% of that population were prescribed cholesterol lowering medication.

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2. U.S. Department of Health and Human Services: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Public Health Service, DHHS Publication No. (PHS) 91-50213, 1991.

EVER HAD BLOOD CHOLESTEROL CHECKED

		Yes - Had Blood Cholesterol Checked	
Sex	Age Group	N	%
Male	18-24	10	20.1
	25-34	51	44.1
	35-44	68	56.1
	45-54	48	67.4
	55-64	58	78.9
	65+	95	79.5
	Total	330	55.8
Female	18-24	11	31.3
	25-34	65	39.4
	35-44	69	54.5
	45-54	86	76.4
	55-64	79	79.9
	65+	149	78.6
	Total	459	59.2
Total (both sexes)	18-24	21	25.7
	25-34	116	41.7
	35-44	137	55.3
	45-54	134	72.0
	55-64	137	79.4
	65+	244	79.0
	Total	789	57.6

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

EVER TOLD YOUR BLOOD CHOLESEROL IS HIGH*

Yes - Blood Cholesterol is High (>240 mg%)

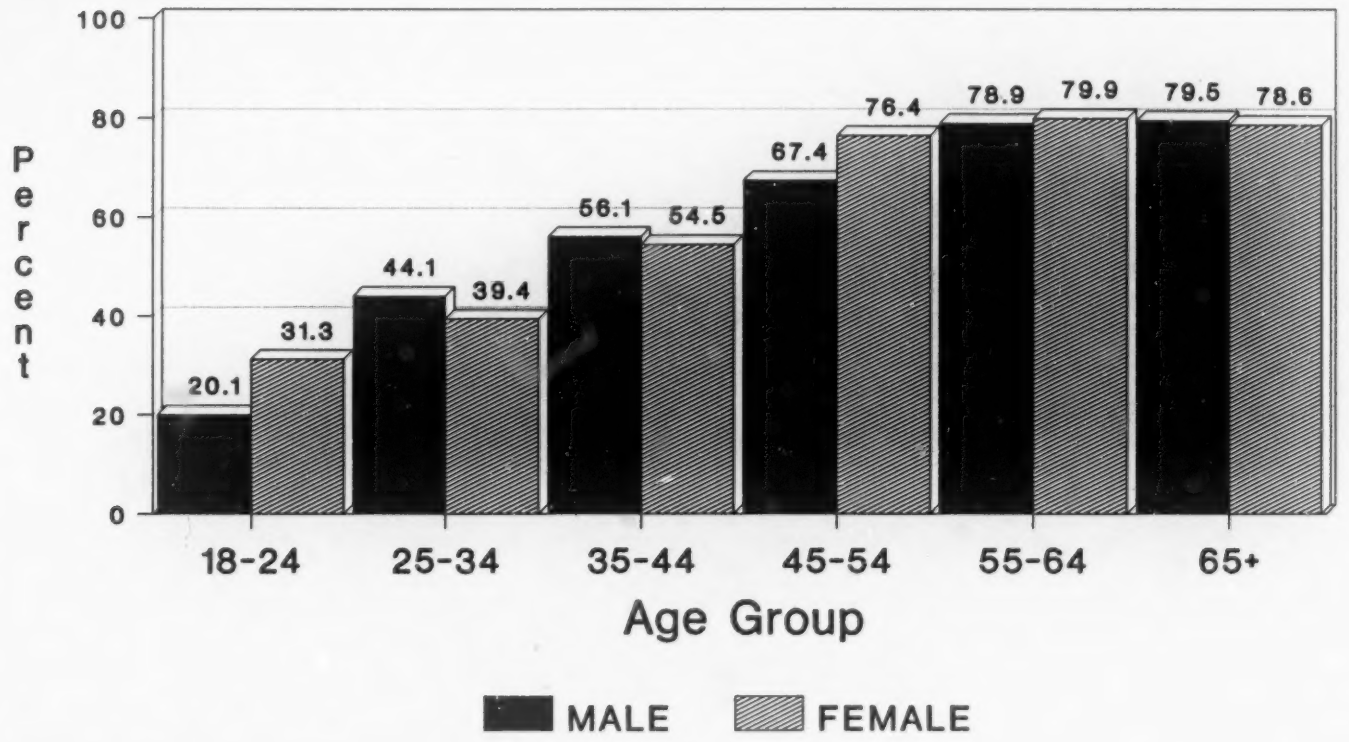
Sex	Age Group	N	%
Male	18-24	1	8.9
	25-34	7	15.5
	35-44	16	25.6
	45-54	12	24.7
	55-64	17	29.3
	65+	17	18.7
	Total	70	21.6
Female	18-24	1	3.8
	25-34	10	15.6
	35-44	13	16.5
	45-54	17	18.5
	55-64	27	32.7
	65+	50	35.4
	Total	118	24.1
Total (both sexes)	18-24	2	5.8
	25-34	17	15.5
	35-44	29	21.1
	45-54	29	21.3
	55-64	44	31.1
	65+	67	28.7
	Total	188	22.9

*High Blood Cholesterol - Blood cholesterol level of 240 mg% or greater.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

CHOLESTEROL CHECKED

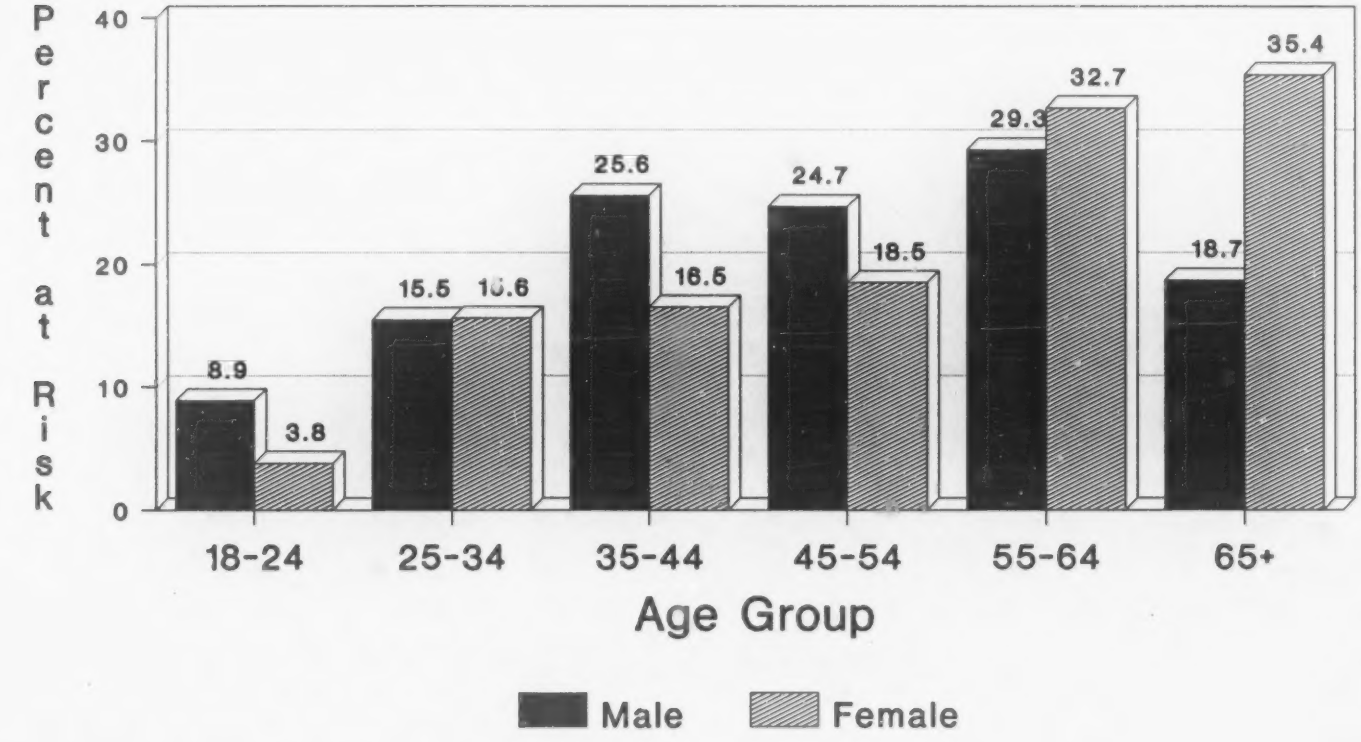
(Ever had blood cholesterol checked)



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
n=789

HIGH CHOLESTEROL

(Greater than or equal to 240 mg%)



Source:1989 Behavorial Risk Factor Surveillance System, IDPH
n=188

SEAT BELT USE

Background

In 1989 traffic fatalities accounted for 45,500 deaths nationwide[1] and 541 deaths in Iowa[2]. U.S. Transportation Secretary, Samuel Skinner, relates this to increased seat belt usage, heightened awareness of highway safety and our national fight against drunk driving[1].

In Iowa, "Life Toll" contains the names of people who have survived life-threatening crashes because they wore seat belts, according to law enforcement officials. A total of 760 names have been added to Iowa's "Life Toll" since July 1, 1986, the effective date for Iowa's seat belt law requiring driver and front seat passenger to use seat belts[1].

Seat Belt Use in Iowa

In 1989, 76.2% of Iowans reported wearing their seat belt "always or nearly always." Of those 69% were male while 82.7% were female. Only 5.2% of Iowans reported "never" wearing their seat belt. While these rates represent telephone surveys, actual observation studies show a much lower rate of seat belt usage. In 1989, a cooperative survey of the Department of Transportation and Iowa State Patrol observed 59% of Iowans used seat belts. Approximately 72% of the drivers observed on the interstate, 56% on primary roads, 61% on secondary roads, and 49% in cities and towns were wearing seat belts[3]. In 1989, more than 49,500 persons were convicted of not wearing their seat belts. Of those convicted, nearly 80% were under age of 35[3].

Comparison With Other States

Iowa had the 12th highest rate of seat belt use out of the 40 states participating in the BRFSS. The median was 71.4% while Iowa has 76.2% of the population wearing their seat belt in the front seat.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives for seat belt use is to extend the seat belt use law to at least 45 states. Iowa has met this objective with the law passing in July 1986.

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2. Iowa Department of Public Health: Iowa 1989 Vital Statistics. Des Moines, 1989.
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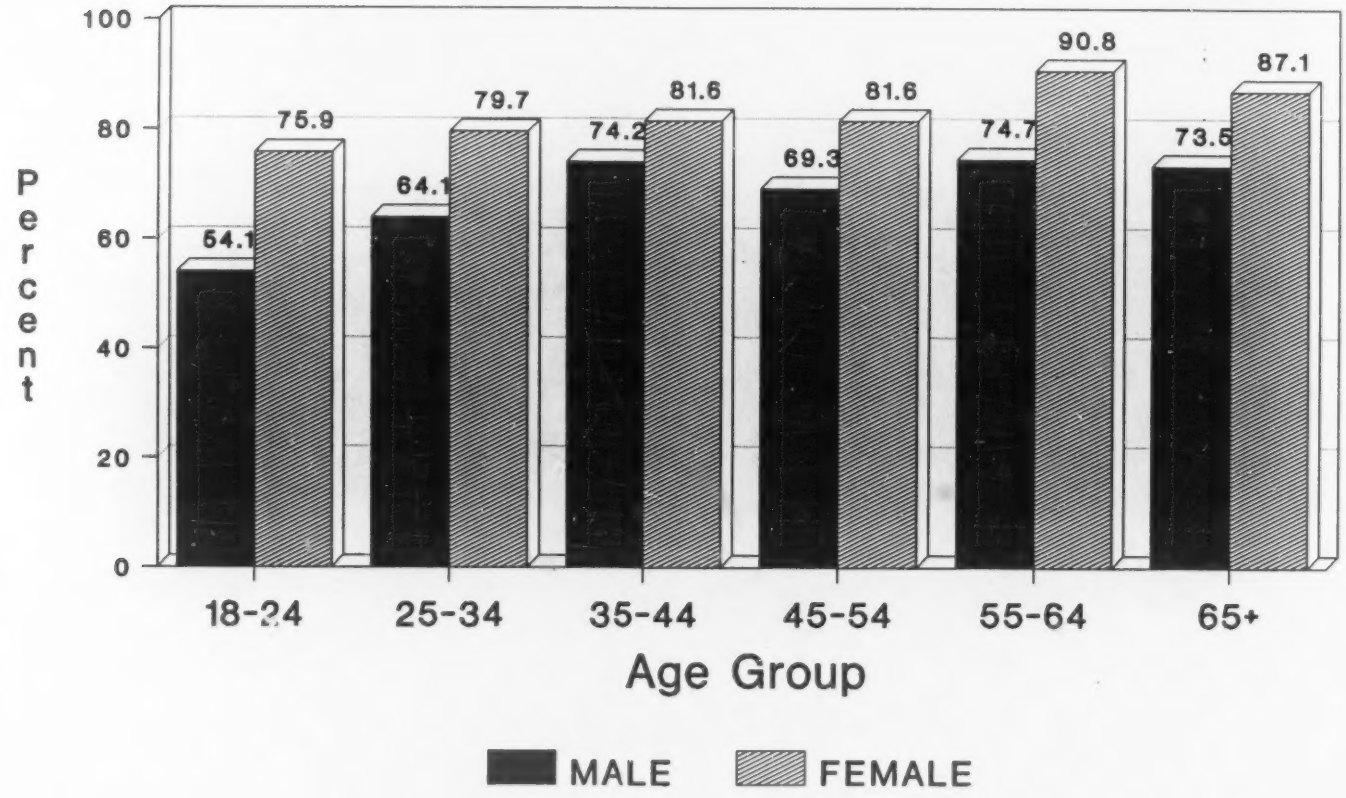
SEATBELT USE

Sex	Age Group	N	Always or Nearly Always %
Male	18-24	28	54.0
	25-34	71	64.1
	35-44	92	74.2
	45-54	50	69.3
	55-64	57	74.7
	65+	88	73.5
	Total	386	69.0
Female	18-24	31	75.9
	25-34	129	79.7
	35-44	106	81.6
	45-54	89	81.6
	55-64	90	90.8
	65+	173	87.1
	Total	618	82.7
Total (both sexes)	18-24	59	65.0
	25-34	200	71.7
	35-44	198	80.5
	45-54	139	75.6
	55-64	147	83.1
	65+	261	81.6
	Total	1004	76.2

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

SEATBELT USE



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
n=1004

EXERCISE

Background

Studies show that the incidence of coronary heart disease (CHD) is approximately twice as high among sedentary men than among those who regularly participate in vigorous physical activity either leisure time or occupational [1-5]. This relative risk is only slightly less than the relative risk of smoking, high blood pressure and high blood cholesterol[6]. There are more people at risk for CHD due to inactivity than for any other single risk factor[6]. Thus, it may be the risk factor exerting the greatest impact on public health and coronary heart disease.

Evidence also suggests that physical activity may positively affect weight control, has antidepressant effects and may reduce temporary anxiety[7,8].

Exercise in Iowa

In 1989, 34.1% of Iowans had a sedentary lifestyle, defined as less than 20 minutes of leisure time physical activity three or more times per week. The prevalence of sedentary lifestyle was higher in females, 36.5% than males, 31.5%. Regular physical activity was reported by 28.1% of Iowans. Of those 27.1% were males and 29.0% were females. A total of 28.9% of Iowans reported some physical activity but not on a regular basis.

Comparison With Other States

In 1989, Iowa ranked 30th out of the 40 states participating in the BRFSS for prevalence of a sedentary lifestyle or irregular physical activity. The median was 58.7% while Iowa reports 62.9% of the adult population as sedentary or having irregular physical activity.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives state that the proportion of people age 6 and older who participate in moderate physical activities 3 or more days per week for 20 or more minutes per occasion increase to at least 60%. Although the age groups are not directly comparable, it does not appear that Iowans are meeting the Year 2000 Health Objective. According to BRFSS, 28.1% of Iowa's adults 18 and older are participating in regular physical activity.

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2. Morris, J.N., et al.: Vigorous exercise in leisure-time: Protection against coronary heart disease. Lancet 2:1207-1210, 1980.
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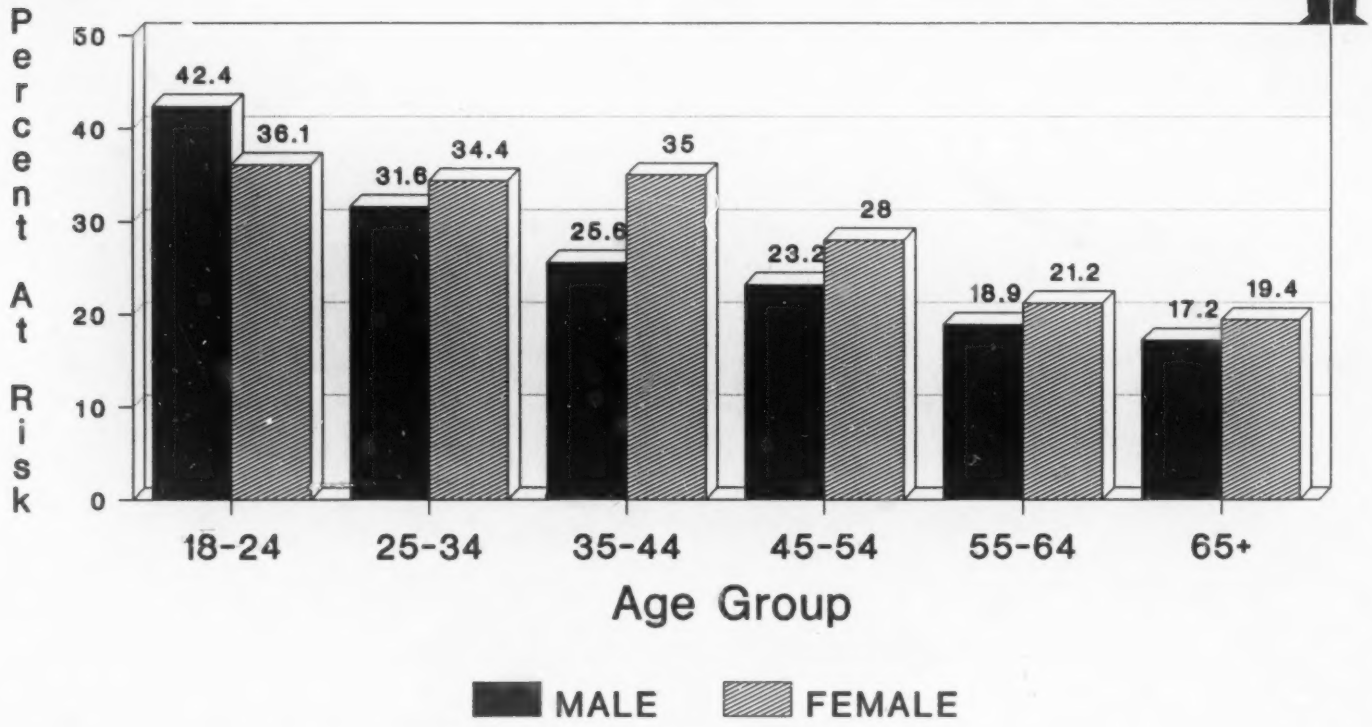
PHYSICAL ACTIVITY

		Sedentary		Regular*	
Sex	Age Group	N	%	N	%
Male	18-24	11	19.2	23	42.4
	25-34	23	22.8	38	31.6
	35-44	30	27.4	31	25.6
	45-54	29	42.3	19	23.2
	55-64	34	44.2	13	18.9
	65+	54	42.8	21	17.2
	Total	181	31.5	145	27.1
Female	18-24	9	22.9	16	36.1
	25-34	53	35.4	57	34.4
	35-44	40	34.1	40	35.0
	45-54	40	37.3	31	28.0
	55-64	40	41.8	20	21.2
	65+	89	44.3	40	19.4
	Total	271	36.5	204	29.0
Total (both sexes)	18-24	20	21.0	39	39.3
	25-34	76	29.0	95	33.0
	35-44	70	30.8	71	30.3
	45-54	69	39.7	50	25.6
	55-64	74	43.0	33	20.1
	65+	143	43.7	61	18.5
	Total	452	34.1	349	28.1

*Regular Exercise - Duration of more than 20 minutes, three times a week of leisure time activity.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

PHYSICAL ACTIVITY
Regular



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
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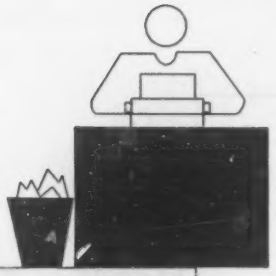
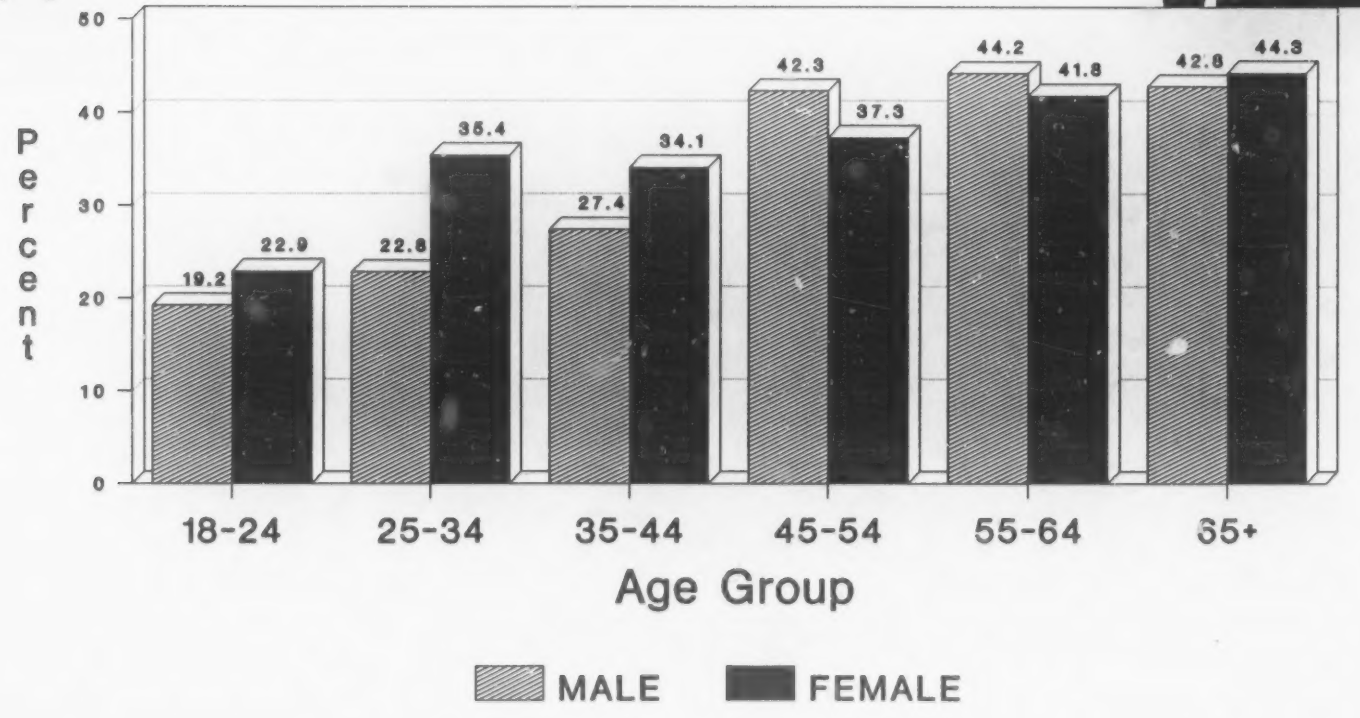
PHYSICAL ACTIVITY
Sedentary





Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
n=452

ALCOHOL USE

Background

In 1985, approximately 95,000 deaths nationally were related to alcohol[1]. This includes all deaths for which alcohol is the underlying cause. Approximately half of all motor vehicle accidents are alcohol related. Alcohol is implicated in nearly half of all intentional suicides and homicides[2]. Approximately one-third of all accidental homicides, drownings and boating crashes are related to alcohol intoxication[2].

Alcohol dependency and abuse is a major public health problem carrying a large economic cost and demands on the health care system. In 1984, alcohol abuse cost the nation $116 billion[2].

Alcohol Abuse in Iowa

Definition:

Acute Drinking: Respondents who report having five or more drinks on an occasion, one or more times in the past month.

Current Drinking: Respondents who report having had alcoholic beverages in the past month.

Drinking and Driving: Respondents who report having driven after having too much to drink, one or more times in the past month.

Chronic Drinking: Respondents who report an average of 60 or more alcoholic drinks a month.

In 1989, an estimated 16.6% of adult Iowans were engaged in acute drinking (having five or more drinks on an occasion, one or more times in the past month). Of those 22.7% were male while 10.9% were female.

An estimated 54% of Iowans consumed alcohol in the past month with 63.8% of those being male and 45% being female. Of those reporting alcohol consumption, 47.5% report drinking less than ten drinks a month, 19.4% having 10-20 drinks a month, 17.5% drinking 21-40 drinks a month, 6.3% having 41-59 drinks a month and 7.7%% consuming 60 or more drinks a month.

Of Iowans who reported drinking during the previous month, 90.4% reported not driving after drinking, 5.2% reported driving only once having had too much to drink, 1.9% reported driving twice, 0.2% driving 3 to 4 times and 0.3% driving five or more times after having too much to drink. Too much to drink is self defined; therefore, these numbers may be under reported.

Comparison With Other States

Of the 40 states participating in BRFSS, 23 had a lower prevalence of current drinking (having had alcoholic beverages during the past month) than Iowa. In 1989, Iowa had 53.9% of current drinkers while the median was 53.2%.

Of the 40 states participating in BRFSS, 24 had a lower prevalence of acute drinking (having five or more drinks on an occasion one or more times during the past month) than Iowa. In 1989, Iowa had 16.6% of acute drinking while the median was 15.4%.

Of the 40 states participating in BRFSS, 23 had a lower prevalence of chronic drinkers (having sixty or more drinks during the past month) than Iowa. In 1989, Iowa had 4.2% of chronic drinkers while the median was 3.7%.

Of the 40 states participating in BRFSS, 32 had a lower prevalence of drinking and driving (driving after having too much to drink, one or more times during the past month) than Iowa. In 1989, Iowa had 4.1% of people drinking and driving while the median was 2.9%.

Year 2000 Health Objectives For the Nation

The Year 2000 Health Objectives relate to health status, risk reduction, public awareness, professional education and awareness, and service and protection to reduce alcohol and other drug problems. They do not include objectives related to alcohol consumption as defined by the 1989 BRFSS.

BIBLIOGRAPHY FOR ALCOHOL USE

1. U.S. Department of Health and Human Services: The Economic Cost of Alcohol and Drug Abuse and Mental Illness: 1985. Public Health Service, Washington, D.C., 1990.
2. U.S. Department of Health and Human Services: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Public Health Service, DHHS Publication No. (PHS) 91-50213, 1991.

ACUTE DRINKING*

Sex	Age Group	At Risk N	At Risk %
Male	18-24	26	47.3
	25-34	42	35.7
	35-44	19	16.6
	45-54	14	15.7
	55 64	7	8.8
	65+	5	3.5
	Total	113	22.7
Female	18-24	14	44.6
	25-34	19	11.1
	35-44	12	9.4
	45-54	0	0
	55-64	6	5.4
	65+	2	0.7
	Total	53	10.9
Total (both sexes)	18-24	40	45.9
	25-34	61	23.6
	35-44	31	13.0
	45-54	14	7.7
	55-64	13	7.0
	65+	7	1.8
	Total	166	16.6

*Acute drinking - Respondents who report having five or more drinks on an occasion, one or more times in the past month.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

DRINKING AND DRIVING*

Sex	Age Group	At Risk N	At Risk %
Male	18-24	7	12.5
	25-34	14	12.7
	35-44	4	3.1
	45-54	4	3.1
	55-64	2	2.1
	65+	1	0.9
	Total	32	6.4
Female	18-24	3	10.8
	25-34	5	2.7
	35-44	0	0.0
	45-54	0	0.0
	55-64	0	0.0
	65+	0	0.0
	Total	8	2.1
Total (both sexes)	18-24	10	11.7
	25-34	19	7.8
	35-44	4	1.6
	45-54	4	1.5
	55-64	2	1.0
	65+	1	0.4
	Total	40	4.1

*Drinking and driving - Respondents who report having driven after having too much to drink, one or more times in the past month.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

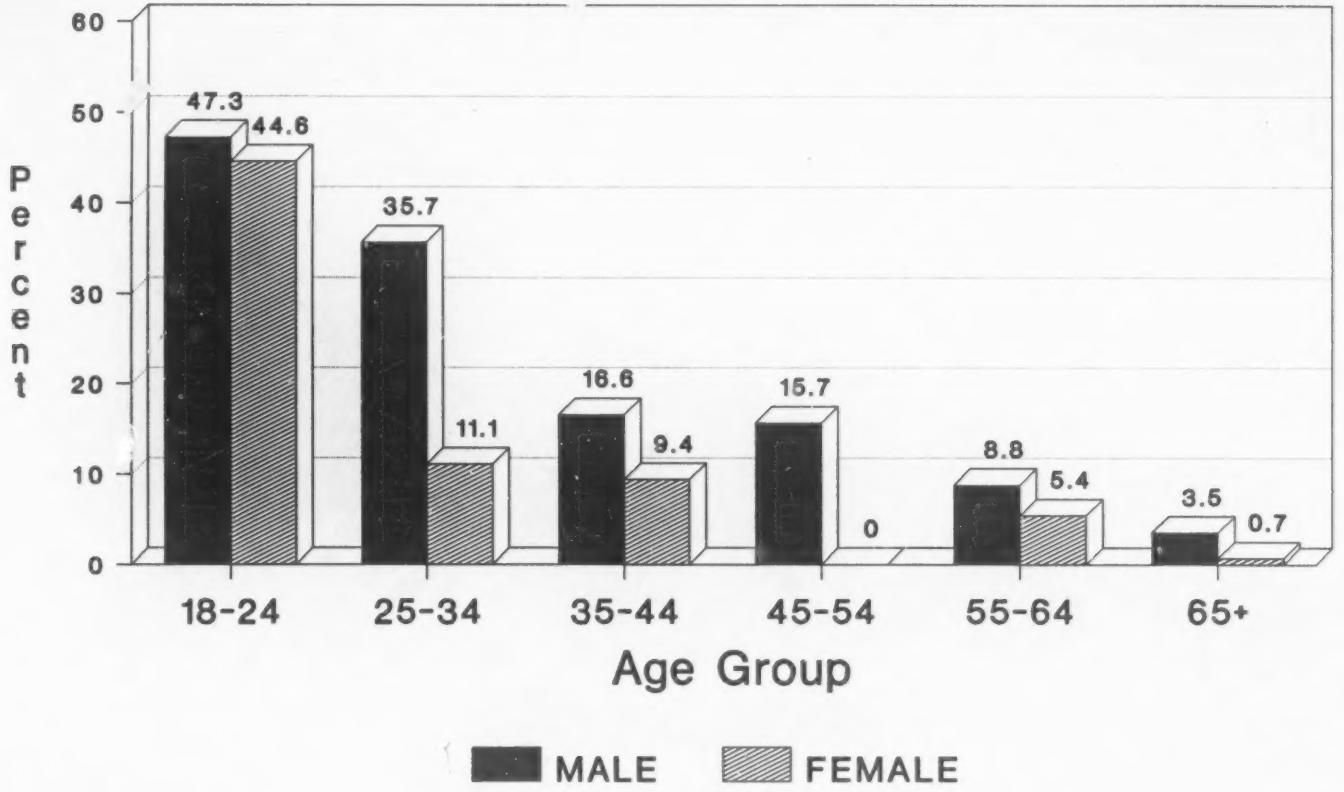
CHRONIC DRINKING*

Sex	Age Group	At Risk N	At Risk %
Male	18-24	6	11.2
	25-34	9	7.8
	35-44	5	4.0
	45-54	7	8.2
	55-64	7	9.5
	65+	5	3.0
	Total	39	7.0
Female	18-24	1	4.8
	25-34	2	1.0
	35-44	0	0
	45-54	0	0
	55-64	1	1.1
	65+	5	2.2
	Total	9	1.5
Total (both sexes)	18-24	7	8.0
	25-34	11	4.5
	35-44	5	2.0
	45-54	7	4.0
	55-64	8	5.1
	65+	10	2.5
	Total	48	4.2

*Chronic drinking - Respondents who report an average of 60 or more alcoholic drinks a month.

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

ACUTE DRINKING



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
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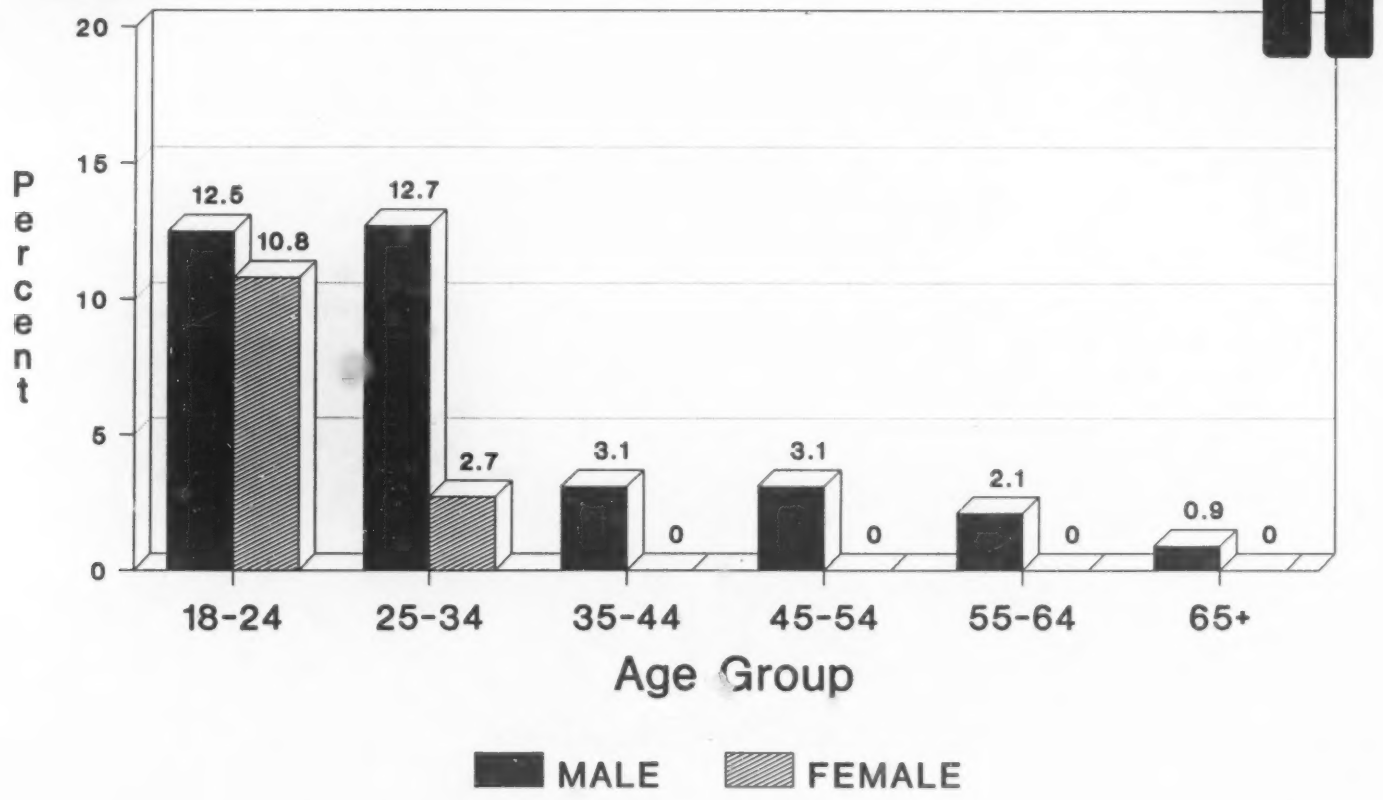
DRINKING AND DRIVING



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
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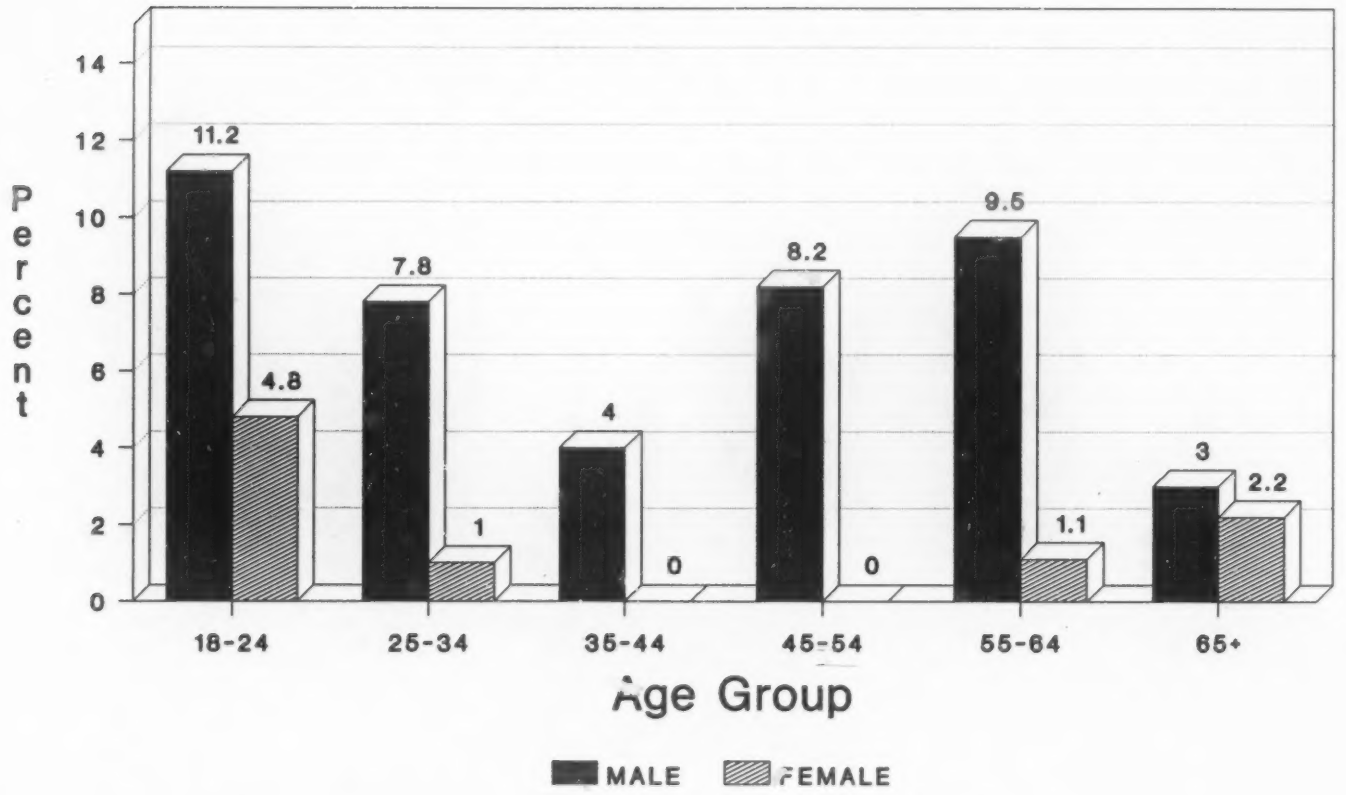
CHRONIC DRINKING



Source: 1989 Behavorial Risk Factor Surveillance System, IDPH
n=48

MAMMOGRAPHY

Background

It is estimated that in 1988, there were 135,000 new cases of breast cancer reported in the United States and an estimated 42,300 deaths from this disease[1]. Breast cancer is the second leading cause of cancer deaths in women (lung cancer is first). Approximately one in every ten women will develop breast cancer.

The American Cancer Society (ACS) recommends a baseline mammogram for women aged 35-39 years of age. Asymptomatic women aged 40 to 49 should have mammogram every one to two years. Asymptomatic women 50 years of age and older are recommended to have mammography every year[2]. Through proper screening, including breast self-examination, clinical breast examination and mammography, breast cancer mortality may be decreased by 30%[3].

Mammography in Iowa

In 1988, 44.2% of the adult women surveyed reported they have had a mammogram at some time. Of Iowa women age 35 and older, 65.4% have had a mammogram with 40.7% of those being done in the past year. The most important reason cited for not having a mammogram was that it was not recommended (47.1%). The most common reason for having a mammogram was that it was done as part of a routine checkup (75.3%), and the second most common reason cited is due to a breast problem (21.7%). It was the doctor's recommendation to have a mammogram 69.8% of the time and the respondent's request to have a mammogram 27.8% of the time.

Comparison With Other States

Iowa ranked 11th among the 40 states participating in the BRFSS for having the lowest rate of mammograms. The national median was 43.3%, while Iowa reports 41% of adult women having had a mammogram.

Year 2000 Health Objectives for the Nation

The Year 2000 Health Objectives state that the proportion of women age 40 and older who have a clinical breast exam and a mammogram increase to at least 80%. The 1989 Iowa BRFSS sample reports 65.4% of women age 35 and older have had a mammogram.

The second Year 2000 Health Objectives state that the proportion of women age 50 and older who have a clinical breast exam and a mammogram within the last year increase to at least 60%. The 1989 BRFSS sample reports 70.1% of women age 45 and older have had a mammogram within the past year. This exceeds the Year 2000 Objectives but does not address the issue of a clinical breast examination accompanying the mammogram.

BIBLIOGRAPHY FOR MAMMOGRAPHY

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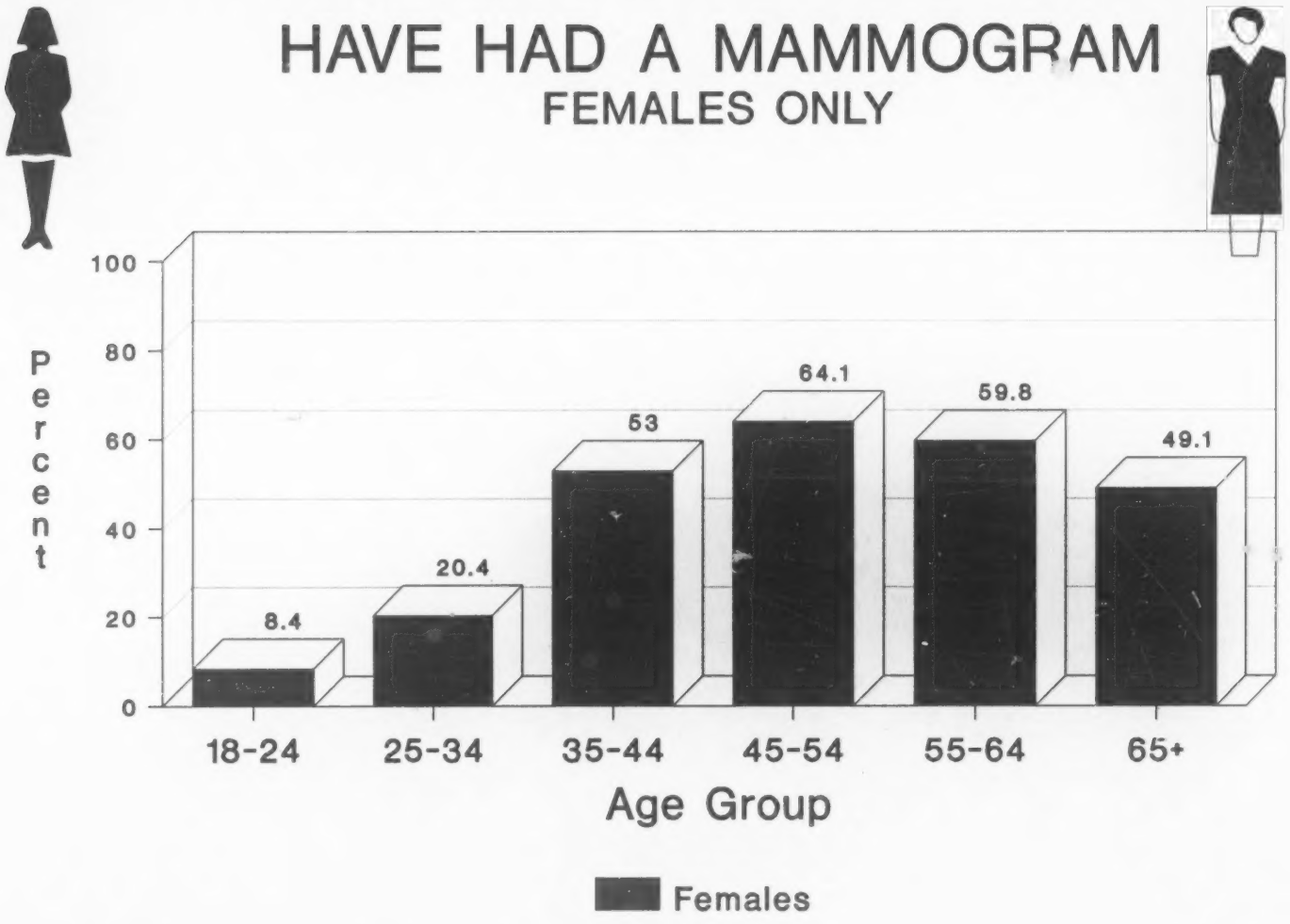
3. Shapiro, S., Venet, W., Strax, P., et al: Ten to fourteen year effect of screening on breast cancer mortality. Journal of National Cancer Institute 59:823-832. 1977.

EVER HAD A MAMMOGRAM - FEMALES ONLY

		Yes	
Sex	Age Group	N	%
Female	18-24	3	8.4
	25-34	33	20.4
	35-44	63	53.0
	45-54	70	64.1
	55-64	58	59.8
	65+	96	49.1
	Total	323	44.2

Data collected from the 1989 Behavioral Risk Factor Surveillance System, Bureau of Nutrition and Health Promotion, Iowa Department of Public Health

HAVE HAD A MAMMOGRAM
FEMALES ONLY



Source:1989 Behavorial Risk Factor Surveillance System, IDPH
n=323